**Document title** Remove/install right cylinder head cover

**Document number** ar0120p5012els

## Engine 276.8 in model 207, 212, 218

### **Modification notes**

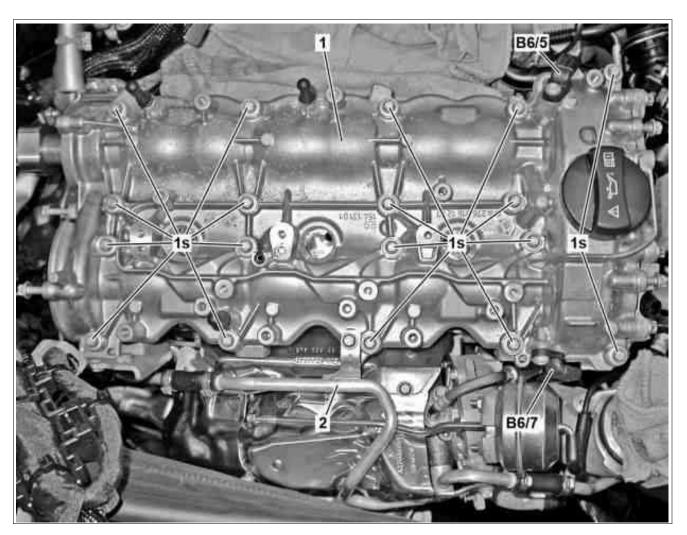
05.08.2019	Information document AH00.00-P-0500-01MNE, added.	Operation step 19.	
05.08.2019	Information document AH05.20-P-1000-09SZ, added.	Operation step 21.	

1 Right cylinder head cover

1s Bolts

2 Coolant feed line

B6/5 Right intake camshaft Hall sensorB6/7 Right exhaust camshaft Hall sensor



P01.20-2338-06

⚠ Warning	<b>Risk of injury</b> caused by fingers being jammed or pinched when removing, installing or aligning hoods, doors, trunk lid/rear-end door or sliding roof.	No parts of the body or limbs should be within the operating area when the components are moving.	AS00.00-Z-0011-01A
	Notes on threaded connections with aluminum screws/bolts		AH00.00-P-0006-01RM
	General information on work on gasoline direct injection system		AH07.00-P-2000-01A
X	Remove/install		
1	Open engine hood and position upright.	Engine 276.8 in model 207, 212, 218 Model 207, 212 with engine 276.8	AR88.40-P-1000EW
2	Disconnect ground line from battery.  Notes on battery		AR54.10-P-0003EW AH54.10-P-0001-01A
3	Remove upper engine cover.		
4	Remove ME-SFI [ME] control unit.		AR07.08-P-7008ELS
5	Remove air filter housing.		AR09.10-P-1150ELS
6	Remove noise dampening of the right and left fuel injectors.		
7	Drain off coolant.  Notes on coolant	Model 207 with engine 276.8  Model 212, 218 with engine 276.8	AR20.00-P-1142A AH20.00-N-2080-01A AR20.00-P-1142EL
8	Remove coolant hose of the heating from the bulkhead.		
9	Remove center section of the bulkhead.	Engine 276.8 in model 207, 212, 218 Engine 276.8 in model 212	AR61.25-P-6600EW
10	Remove engine wiring harness on the engine side and set aside.		AR01.00-P-2410-02ELS
11	Remove charge air cooler from the hoses of the charge air pipes and remove from the throttle valve actuator and pull toward the front with connected lines.		AR09.41-P-6819ELS
12	Remove ignition coils.	Model 207 with engine 276.8	AR15.12-P-2003FH
		Model 212, 218 with engine 276.8	AR15.12-P-2003EL

13	Remove high pressure pump housing.	Model 207 with engine 276.8	AR07.02-P-1020FH
		Model 212, 218 with engine 276.8	AR07.02-P-1020EL
14	Remove centrifuge cover from the right cylinder head cover (1) and cylinder head.		AR01.20-P-2100ELS
	indu dever (1) and eyimaer nead.	(1)	
		Do not bend centrifuge cover too far to the rear.	
		The oil lines to the oil separator will be damaged otherwise.	
		i Installation: Replace seal.	
15	Remove right rail.	Model 207 with engine 276.8	AR07.03-P-1010FH
16	Remove front cover from the right cylinder head.	Model 212, 218 with engine 276.8	AR07.03-P-1010EL AR01.30-P-5712ELS
17	Remove coolant feed line (2) from the exhaust	Engine 276.8 in model 207, 212, 218	ARU1.30-F-37 12ELS
	gas turbocharger and right cylinder head cover	except code 920 (Direct petrol injection with	
	(1).	stratified charging)  i Installation: Replace seal.	
		Bolt for coolant line attachment	*BA09.40-P-1010-01W
		Nm Bolt, coolant feed/return line to turbocharger	*BA09.40-P-1008-01W
18	Loosen screws (1s) of the right cylinder head	Bolt tightening procedure for cylinder head cover	
	cover (1) in reverse order of the tightening procedure and remove.		
	procedure and remove.	i Installation: Replace screw/bolts (1s) with	
		new ones.	
		Screw/bolt, cylinder head cover to cylinder head	*BA01.20-P-1004-01L
19	Carefully pry off right cylinder head cover (1)		
	from the cylinder head.  Notes on application of flange sealants to seal		AH00.00-P-0500-01MNE
	major assemblies		74100.001 0000 01111112
	Notes on sealant path for cylinder head cover		AH01.30-P-1000-08MM
		Do <b>not</b> hammer in a tool to pry off between the	
		right cylinder head cover (1) and cylinder head.	
		The sealing surfaces can be damaged otherwise.	
		i Installation: Apply sealant as per the notes	
		on sealant path to the right cylinder head cover	
		(1). Sealant, Loctite 5970, 50 ml	*BR00.45-Z-1013-01A
		Application gun	*112589002500
20	Modify right intake camshaft Hall sensor (B6/5),	Only when replacing the right cylinder head	
	right exhaust camshaft Hall sensor (B6/7), and all brackets on the right cylinder head cover (1).	cover (1)	
		Nm Bolt, camshaft Hall sensor to cylinder head	*BA15.10-P-1006-03E
	Check	cover	
21	Check camshaft mounts in the right cylinder		
	head cover (1) and check camshafts for galling		
	and score marks.  General information on checking camshafts and		AH05.20-P-1000-09SZ
	bearing points of camshafts		A1103.20-F - 1000-0932
		If the camshaft mounts are damaged,	
		Replace right cylinder head cover or right	
		camshaft.	ADOL 00 D 000051
		Engine 276.8 in model 212, 218 Engine 276.8 in model 207	AR05.20-P-6992EL AR05.20-P-6992FH
	Clean	<u> </u>	
22	Clean sealing surfaces on the cylinder head and		AR01.00-P-0050-01A
	right cylinder head cover (1).	(1)	
		Do not use any sharp-edged tools or abrasive	
		paper. The sealing surfaces can be damaged	
		otherwise.	
		Loctite 7200	*BR00.45-Z-1038-04A
23	Install in the reverse order.	Loctite 7063 (400 ml) cleaning spray	*BR00.45-Z-1046-04A
24	Check engine cooling system for leak tightness.	Model 207 with engine 276.8	AR20.00-P-1010ELA
		Model 212, 218 with engine 276.8	AR20.00-P-1010EL
25 <b>№ AP</b>	Check engine oil level and correct if necessary.		AD18 00 D 01010WZ
⚠ Warning	Risk of accident from vehicle starting off by		AP18.00-P-0101CWZ AS00.00-Z-0005-01A
•• •••••••••••••••••••••••••••••••••••	itself when engine running. Risk of injury	itself. Wear closed and snug-fitting work clothes.	
	(bruises and burns) resulting from working on the engine while it is being started or when it is	טען not touch not or rotating parts.	
	running.		

## Nm Crankcase ventilation, cylinder head cover

Number	Designation			Engine 276
BA01.20-P-1004-01L	Screw/bolt, cylinder head cover to cylinder head	Stage 1	Nm	12
		Stage 2	۷°	90

# Nm Turbocharger

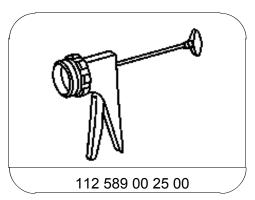
Number	Designation	Engine 276.8
BA09.40-P-1008-01W	Bolt, coolant feed/return line to turbocharger Nm	9

### Nm Turbocharger

Number	Designation			<b>Engine 276.8</b>
BA09.40-P-1010-01W	Bolt for coolant line attachment	M6	Nm	9

### Nm Position sensor

Number	Designation		Engine 276
BA15.10-P-1006-03E	Bolt, camshaft Hall sensor to cylinder head cover N	lm	9



Application gun

#### Repair materials

Number	Designation	Order number
BR00.45-Z-1013-01A	Sealant, Loctite 5970, 50 ml	A 003 989 98 20 10
BR00.45-Z-1038-04A	Loctite 7200	Henkel AG & Co. KGaA <a href="http://www.loctite.de">http://www.loctite.de</a>
BR00.45-Z-1046-04A	Loctite 7063 (400 ml) cleaning spray	A 001 986 71 71 09